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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,262	03/22/2004	Masahiko Kubo	1254-0245PUS1	8959

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EXAMINER

RODEE, CHRISTOPHER D

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 05/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/805,262

Applicant(s)

KUBO, MASAHIKO

Examiner

Christopher RoDee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/22/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

The incorporation of essential material in the specification by reference to an unpublished U.S. application, foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office. The amendment must be accompanied by a statement executed by the applicant, or a practitioner representing the applicant, stating that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. 37 CFR 1.57(f).

The penetration of the wax is described in the specification as being determined by a foreign standard, specifically JIS K 2235-5.4 (spec. p. 10). This measurement is essentially to understand the meaning of dependent claim 3. The JIS must be incorporated into the specification in the manner described above.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 3 is indefinite as currently presented because it is unclear what the penetration of the wax defines. It appears that this feature relies upon the foreign standard discussed above, but it is not clear what this standard is or if the standard is definite for the purposes of US Patent Law.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 2002-311642.

The JP document discloses a full color toner containing a polyester binder resin with an acid number (i.e., acid value) of 0.5 to 20 mg KOH/g (¶ [0030]), a colorant, and carnauba wax (¶ [0031], [0032]). The toner also contains a release agent, which is disclosed as a paraffin wax (¶ [0037]). The toner also contains a charge control agent to give negative polarity (¶ 0035)). The binder resin has a preferred acid value of 18 mg KOH/g or less (¶ [0030]) and a softening point of 105 to 120 °C (¶ 0029)), which would appear to equate to the melting point of the binder. The paraffin wax disclosed in the JP document appears to inherently be non-polar because paraffin wax is non-polar (i.e., it is a hydrocarbon) unless specific steps are taken to introduce polar groups. The “non-polar” limitation is seen as present in the disclosure of paraffin wax. The combination of the these waxes would inherently have the requisite DSC characteristics of claim

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4 because the same waxes are disclosed as are required by the claim. Consequently, the properties of these waxes must be the same.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2002-311642.

This JP document was described above and that discussion is incorporated here. The document does not specify the mixing ratio of the paraffin wax and the carnauba wax or the addition amount of the wax mixture based on the total toner. However, the JP document does disclose the use of a release agent, such as paraffin wax, with carnauba wax where the carnauba wax is present in an amount of from 1 to 10 weight %.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the total amount and relative amounts of the two waxes in order to provide the fixability, transparency, and offset resistance of the document. Further, in the event the disclosure of the JP document is not seen as sufficient to anticipate the claims where the toner contains the carnauba wax and the paraffin wax, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a combination of these waxes because the reference discloses carnauba wax as required and discloses paraffin wax as one of a relatively small number of possible release agents. Given this limited disclosure, the

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artisan would have found it obvious to use the carnauba wax and the paraffin wax as a release agent in order to obtain the results of the invention.

Claims 1, 2, and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000-267338 in view of *Handbook of Imaging Materials* to Diamond, pp. 162-165, 167, 168.

JP '338 discloses a toner having a polyester binder resin, a colorant, and a carnauba wax in Example 3. The polyester has an acid number (i.e., acid value in kg KOH/g) of 12. The document teaches in the Abstract that the wax has a DSC heat starting temperature of 40 to 120 °C, preferably 45 to 100 °C (¶ [0025]) and a melt viscosity of 80 to 120 °C. The document also teaches that paraffin wax is an effective wax in the toner (¶ [0029]).

The JP document does not specify the charge on the toner and does not disclose a combination adding paraffin wax to the exemplified toner having carnauba wax.

Diamond teaches that toners conventionally contain a charge control additive to give the desired charge to the toner (pp. 163, 165, 169). These components are added for both positive and negative charging toners (p. 169).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to produce the toner of the JP document with a negative charge because there are only two possible charges for the toner: positive and negative. The artisan would have found it obvious to add a charge control additive to the toner in order to give either polarity and level of charge to the toner. The artisan would also have found it obvious to use a combination of carnauba and paraffin waxes disclosed by the reference as effective because "it is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually

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taught in the prior art.” *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). The combination of the two disclosed waxes to form a mixture of these waxes when both are taught as effective would have been *prima facie* obvious given the reasoning of *Kerkhoven*. The artisan would have found it obvious to optimize the relative amounts of the two waxes in order to provide the storage stability and offset resistance of the document. Additionally, the paraffin wax disclosed in the JP document appears to inherently be non-polar because paraffin wax is non-polar (i.e., it is a hydrocarbon) unless specific steps are taken to introduce polar groups. The “non-polar” limitation is seen as present in the disclosure of paraffin wax.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-6 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of copending Application No. 10/805206.

Although the conflicting claims are not identical, they are not patentably distinct from each other

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because the copending claims identify a toner composition that is that is more specific than the claimed toner except for a slightly broader range of acid value (5 to 20 in the copending application versus 7 to 20 in the instant claims). However, given the specific disclosure of an acid value of 20 mg KOH/g and the fact that the ranges are nearly coextensive, it would have been obvious to select an acid value within the scope of the instant claims, such as at 20 mg KOH/g, in order to obtain an effective toner

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher RoDee whose telephone number is 571-272-1388. The examiner can normally be reached on most weekdays from 6:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cdr
2 May 2006


CHRISTOPHER RODEE
PRIMARY EXAMINER